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SB SAT @ AMSAT $ANS-032.01
OSCAR SKN '98 BEST FIST

HR AMSAT NEWS SERVICE BULLETIN 032.01 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
BID: $ANS-032.01

Ray Soifer, W2RS, Amsat-NA VP OF International Affairs wishes to thank all who participated in AMSAT-NA's OSCAR SKN '98. Although activity was down from prior years due to the loss of RS-10, the temporary loss of Mode K on RS-12 and the unfavorable position of AO-10, a good time was had by those who took part.

Once again our first-place winner was Rusty, NM1K, who received five separate nominations. Two more 1998 winners also had been nominated in previous years: G3RWL and W1NU. Joining the winners' circle for the first time in 1998 were AG2R, K4IPH and VE5SWL. Heartiest congratulations to all.

[ANS thanks Ray Soifer, W2RS, for this news bulletin.]

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SB SAT @ AMSAT $ANS-032.02
CHANGE ON 75 METER AMSAT NET

HR AMSAT NEWS SERVICE BULLETIN 032.02 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
BID: $ANS-032.02

After eight years of exemplary service as NCS of the East Coast 75 meter AMSAT Net, Ron Long, W8GUS, is retiring to pursue other activities. He will continue to assist the new NCS when possible and will continue to support AMSAT in all of the other ways he has in the past. We all owe Ron a big vote of thanks for all of his past efforts and wish him success in his future endeavors.

Ron has groomed his successor, Al Tribble, W3STW, well. Al has been serving as Assistant NCS for some time now. Let's all welcome Al to this position and support him with lots of "check-ins" to the East Coast 75 meter AMSAT Net. As a reminder, this net meets on or about 3.840 MHz each Tuesday evening at 2100 Eastern time. It is followed at 2100 Central time by the Mid-America AMSAT Net, and at 2000 Pacific time by the West Coast AMSAT Net.

To join the ranks of AMSAT HF Net Control Stations, please contact Keith Pugh, W5IU, AMSAT-NA VP of Operations and express your interest. Keith can be reached by e-mail at: w5iu@amsat.org.

[ANS thanks Keith Pugh, W5IU, AMSAT-NA VP of Operations for this news.]

/EX

SB SAT @ AMSAT $ANS-032.03
AMSAT NET FROM P3D LAB

HR AMSAT NEWS SERVICE BULLETIN 032.03 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
BID: $ANS-032.03

The weekly 20 meter International AMSAT Net will be hosted by Keith Pugh, W5IU, AMSAT-NA VP of Operations , from the AMSAT P3D Integration Lab in Orlando, FL, on Sunday, February 15 1998. This net meets on or about 14.282 MHz at 1800 UTC for the "pre-net warm-up" followed by the ANS Bulletin Session at 1900 UTC. Wray Dudley, W8GQW, in Tubac, AZ, and Jack Butler, KB7UZ, in Great Falls, MT, will assist during the "pre-net warm-up."

As a special experiment in conjunction with the new Sunspot Cycle, Wray will simultaneously read the ANS Bulletins on 15 Meters at the old frequency of 21.280 MHz. Depending upon the success of this experiment, the 15 meter AMSAT Net may be re-activated on a regular basis.

Please check in with the AMSAT Net during this "special edition" for an up to date report on the P3D Satellite and on a regular basis to keep up with all of the news about the Amateur Radio Satellite Program.

Other activities in Orlando on the 13-15 Feb. weekend include the ARRL-AMSAT Satellite Workshop on 13 Feb. and the Orlando HamCation for the whole weekend.

[ANS thanks Keith Pugh, W5IU, AMSAT-NA VP of Operations for this news.]

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SB SAT @ AMSAT $ANS-032.04
DOVE QSL INFO

HR AMSAT NEWS SERVICE BULLETIN 032.04 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
BID: $ANS-032.04

Requests for DOVE (DO-17) QSL cards continue to roll into the DOVE QSL Manager, Dianne White, N0IZO. Dianne reminds those who would like a DOVE QSL card that a printout or listing of DOVE's is telemetry is not needed to obtain a card. For a DOVE QSL card send a QSL or SWL card, or just a note, listing the date time
and frequency you heard DOVE to:
Dianne White, N0IZO
45777 Rampart Rd.
Parker, CO 80138-4316
U.S.A.

Be sure to include your callsign or name and a return address.

[ANS thanks Dianne White, N0IZO for this update.

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SB SAT @ AMSAT $ANS-032.05
ANTARCTIC TRIP A SUCCESS

HR AMSAT NEWS SERVICE BULLETIN 032.05 FROM AMSAT HQ

SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
BID: $ANS-032.05

Ronald Ross, KE6JAB, report's that his trip to the Antarctic was a success and his portable satellite station a huge success.

Ronald's station (at 80S/81W) consisted of 2 eggbeaters on 7-foot bamboo poles 20 feet apart, on each side of our tent, a 70 cm SSB preamp, an IC-821, a KPC9612 and a laptop. I had to take a sealed lead acid battery, 12v 18A/Hr, but loaned a solar panel from the Cessna pilot. KE6JAB sent 70 messages of which 16 were JPEG images, using initially UO-22 and then KO-25 also. Those messages and images were posted on HIS website, which got over 700 hits during the operating period.

Three people contributed greatly to the success, Roy Welch W0SL, Jerry Smyth N8ULU, they downloaded from the birds for KE6JAB, and his longtime friend Ed Anderson KE6IZN, who did the web work. Ronald wishes to thank the many other people on the Amsat-BB list who answered his technical questions months ago when.

For all of his passes, KE6JAB was the only one working the birds over the pole, except, each morning ZX0ECF, LW5DGM. PY30G, XQ7GEE and a few others would be logged in. This was when the bird was working it's way down from S. America and over the Pole.

Ronald Ross, KE6JAB, states that"
The station generated a lot of interest amongst other people at the basecamp, they were amazed at the ability of an amateur "network" to provide such communications on a voluntary basis.
Especially when the official communications at the camp were having problems at 2400 baud over Inmarsat. I think Amsat has great resources in technical knowledge and in it's members, and much to be proud of. "
The results of Ronald's trip can be viewed at http://www.thistle.org , as KE6JAB just got back, he will post more digital images in the coming weeks.

[ANS thanks Ronald Ross, KE6JAB, for this report.]

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SB SAT @ AMSAT $ANS-032.06
WEEKLY SATELLITE REPORT PT 1

HR AMSAT NEWS SERVICE BULLETIN 032.06 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
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MIR
The PMS packet station is current turned on, but it is not functional. The Mir crew has just been to busy with other higher priority projects to spend much time adjusting parameters on the PMS. The Mir crew has a set of correct parameters for the TNC.
[ANS thanks the MIREX team for this information]

SAFEX, MIR 70 cm Repeater (Uplink 435.750 MHz FM, Downlink 437.950 MHz FM, subaudible tone 141.3 Hz)
During last weeks momentary Mir attitude control computer shutdown, the Mir crew temporarily shutdown the Amateur Radio station for a few days. The PMS system was turned back on, but it is not known when the crew plans on turning on the SAFEX Repeater.

MIREX has created an Internet Web page containing information regarding Mir and the various Amateur Radio experiments taking place from the space station. The pages are still "under construction", but some good information can be gathered from what has been put together. URLs include the following:

http://www.ik1sld.org/mirex.htm OR
http://www.ik1sld.org/mirex

http://www.geocities.com/~ik1sld/mirex.htm OR
http://www.geocities.com/~ik1sld/mirex
[ANS thanks the MIREX team for this information]

RS-12
(Uplink, 21.21-21.25 MHz and 145.91-145.95
MHz, CW/SSB, Downlink 29.41-29.45 MHz, CW/SSB.
The 15m ROBOT uplink is on as well.
Operational, now in mode KA.
KP4SQ has been on RS12 twice weekly for a month now with good signal
his name is Pedro and his QSL manager is KD8IW
[ANS thanks Rusty Hack, NM1K, for this news.]

RS-15
(Uplink 145.858-145.898 MHz CW/SSB, Downlink 29.354-29.394 MHz CW/SSB)
Operational.

RS-16
At this time only the beacons are on.
Transponder information on RS-16.
 Uplink = 145.915 - 145.948 MHz
 Downlink = 29.415 - 29.448 MHz
 Beacons = 29.408 and 29.451 MHz
 Pwr 29 MHz Down = 1.2 W /4 W

 Beacon 1 = 435.504 MHz
 Beacon 2 = 435.548 MHz
 Pwr 435 MHz Beacons = 1.6 W

RS-17
Sputnik:
The CUT OFF date for submitting SWL cards for Sputnik is February 28.
Not operational. RS-17 has been officially declared dead. New Sputnik-
40 QSL Address QSL Information is as follows: QSL Information for SWL
(Short Wave Listener)

Sergey Samburov (RV3DR)
P.O. Box 73
Korolev-10 City
141070, Russia

There is another address given for QSLing on the Sputnik home page
(http://www.oceanes.fr/~fr5fc/angspoutnik.html, the English language
version), which states under "Listeners" and I quote: "PSE send reports
(envelope + IRC) at FR5KJ radio club. FR5KJ radio club will send you
back a diploma.

FR5KJ radio club
College Jules Reydellet
103 rue de la Republique
97 489 Saint Denis Cedex
Reunion Island.

[ANS thanks the MIREX team for this information]

AO-10
(Uplink 435.030-435.18 MHz CW/LSB, Downlink 145.975-145.825 MHz
CW/USB)
Operational.
AO-10's signals are improving and are quite strong even at apogee, except
for periods of deep QSB, which can be largely corrected by changing
antenna polarization. These findings suggest strongly that AO-10 has
switched itself to its hi-gain antennas. There is probably a component of
Z-axis wobble accounting for the QSB. As illumination has
improved, the FM'ing heard earlier appears to have disappeared. The switch
to hi-gains would also explain the often poor signals near perigee when
the squint angle is particularly bad.

AO-10 is currently experiencing long (90 minute) solar eclipses with
onset after apogee. The MA of onset will continue to increase and the
length of the eclipse will continue to decrease until the period ends
on February 23rd.

AO-10's apogee has moved into the northern hemisphere (ArgP > 180).
Apogee will continue to rise higher to the north for the rest of 1998,
peaking at ArgP = 270 in December.

I have updated my web page to include discussions of the above and
updated, smoothed Keplerian elements.

http://www.cstone.net/~w4sm/AO-10.html
[ANS thanks Stacey Mills, W4SM, for this update on AO-10.]

OZ1MY reports, "AO-10 seems to improve every day. I had very good
signals after the eclipse today (29-1-1998).
The fading is still very deep - but recovery is faster than
14 days ago. The eclipses last for approximately 1r hours now.
Had my first QSO with 9V1UV - and a small talk with
VR2XMT, Charlie, who celebrated Chinese New Year.
Most of the time I ran 25 W to the old fateful 16 turn
helix (G3RUH design) - with that the downlink was at
55 most of the time. The range was approximately 25,000 km at the
start- down to 15,000 km when the bed jumped at me.
Using W4SM's ALON/ALAT I would say that the squint angle at the
start was about 90 degrees - going up to 140 degrees at the end.
Signals were best with 90 degrees."

AO-27
(Uplink 145.85 MHz FM, Downlink 436.792 MHz FM)
Operational
[ANS thanks Michael Wyrick, N4USI, AO-27 Control-op, for this update]

FO-20
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Operational. FO-20 in mode JA continuously.

[ANS Kazu Sakamoto, JJ1WTK, for this report]

FO-29
Voice/CW Mode JA
(Uplink 145.9-146.0 MHz CW/LSB, Downlink 435.8-435.9 MHz CW/USB)
Digital Mode JD
(Uplink 145.85, 145.87, 145.910 MHz FM, Downlink 435.910 MHz FM 9600
baud BPSK)
This info is from JARL Web page. It's an official announcement from
Fuji command station. Originally in Japanese, translation into English
is by Kazu Sakamoto, JJ1WTK.

A memory error was detected in onboard computer system of Fuji-3 (FO-29). Restarting and software reloading is being carried out but is taking a long time due to poor uplink efficiency. The operation sked of FO-29 until the end of January is canceled. The bird will stay in analog mode, mode JA, continuously. A new operation schedule for February will be announced on January 26th or later.
[ANS thanks Kazu Sakamoto, JJ1WTK, for this report.]

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SB SAT @ AMSAT $ANS-032.07
WEEKLY SATELLITE REPORT PT 2

HR AMSAT NEWS SERVICE BULLETIN 032.07 FROM AMSAT HQ
SILVER SPRING, MD, FEBRUARY 01, 1998
TO ALL RADIO AMATEURS BT
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KO-23
(Uplink 145.85, 145.9 MHz FM, Downlink 435.175 MHz FM, 9600 Baud FSK)
KO-23 operating normally
[ANS thanks Jim Weisenberger, AA7KC, for this report]

KO-25
(Uplink 145.980 MHz FM, Downlink 436.5 MHz FM, 9600 Baud FSK.)
KO-25 operating normally.
[ANS thanks Jim Weisenberger, AA7KC, for this report]

OSCAR-11
(Downlink 145.825 MHz. FM, 1200 Baud PSK. Beacon 2401.500 MHz)
Operating normally.
OSCAR-11 REPORT 14 January 1998
During the period 16 December 1997 to January 14 1998 the satellite has continued to provide good signals on its 145.826 MHz. beacon, although occasional interference has been caused by DOVE, which transmits near this frequency.

Interest in the mode-S beacon continues, as stations prepare for P3D. Four reports have been received. Stacey W4SM reported S3-4 signals compared to an S2 noise level. Dove was S8. He uses a two foot diameter G3RUH dish with 2.5t helix, and SSB converter. Manfred XE1ZBO in Mexico City has received strong signals, using a Conifer partial dish, and SSB converter. Mark KE7NS reports good signals, above an S7 noise level. He uses a 21 element beam, Aircom pre-amp, and Drake converter.

The telemetry is nominal. Internal temperatures have continued to fall, and at the present time are 6.4C and 4.2C for battery and telemetry electronics respectively. This fall in temperature is due to increasing solar eclipse times, which are expected to reach a maximum in early February.

Two WOD surveys have been transmitted during the period. Both are of channels 10, 20, 30, 40 (+Y, -X, +X array currents, array voltage), and are dated 14 December and 06 January respectively. They show the effect of solar eclipses, on array currents, and voltage.

The new format AMSAT-UK bulletin, No. 114, is now being transmitted. This contains details of amateur satellite frequencies and modes of operation. It is intended to be a 'fixed' message, which won't become out of date too quickly. It may however be changed from time to time, possibly at monthly or greater intervals. Regular listeners will note that the new bulletin makes a different sound compared to previous bulletins, rather like a new form of binary data. This is because the

bulletin contains regularly placed blocks of spaces, instead of random
text characters.

The operating schedule is unchanged.

ASCII status (210 seconds)
ASCII bulletin (60 seconds)
BINARY SEU (30 seconds)
ASCII TLM (90 seconds)
ASCII WOD (120 seconds)
ASCII bulletin (60 seconds)
BINARY ENG (30 seconds)

There are also additional status blocks after each bulletin is
transmitted, and between ASCII TLM and WOD.

The mode-S beacon is ON, transmitting an unmodulated carrier, but
telemetry indicates that it has partially failed, and delivering half
power. This beacon is a useful test source for those testing mode-S
converters, prior to the launch of P3-D. It is considerably weaker
than DOVE, which should be used for initial testing. Any reports of
reception on 2401 MHz. would be most welcome. Please e-mail
g3cwv@amsat.org.

The 435.025 MHz. beacon is normally OFF. However it can sometimes be
heard when the satellite is being commanded by ground control, ie.
within range of Guildford, UK. When the 435 beacon is transmitting,
the 145 beacon is normally OFF. The data transmitted is mainly
binary.

OSCAR-11 users are welcome to visit my web site. It contains some
software for capturing data, and decoding ASCII telemetry and WOD.
There is an archive of raw data (mainly WOD) for analysis, which is
continually being expanded, as new data is captured. The URL is -

http://www.users.zetnet.co.uk/clivew/
[ANS thanks Clive Wallis, G3CWV, for this information]

AMSAT-OSCAR-16 (PACSAT)
(Uplink 145.9, 145.92, 145.94, 145.86 MHz FM, 1200 bps Manchester FSK
Downlink 437.0513 MHz SSB, 1200 bps RC-BPSK 1200 Baud PSK.
Beacon 2401.1428 MHz.)
Operating normally. AO-16 S band transmitter is off.
uptime is 1231/06:59:27. Time is Sat Jan 31 12:29:21 1998
+X (RX) Temp 3.629 D RX Temp -0.607 D
Bat 1 Temp 5.444 D Bat 2 Temp 6.049 D
Baseplt Temp 5.444 D RC PSK BP Temp 1.814 D
RC PSK HPA Tmp 2.419 D +Y Array Temp -0.002 D
PSK TX HPA Tmp 0.603 D +Z Array Temp 13.311 D
RC PSK TX Out 0.668 W

Total Array C= 0.332 Bat Ch Cur=-0.038 Ifb= 0.053 I+10V= 0.321
TX:010C BCR:81 PWRC:59F BT: A WC:25 EDAC:CC

Information about telemetry values and WOD files can be found at
http://www.arrakis.es/~ea1bcu/wod.htm
 [ANS thanks Miguel A. Menendez, EA1BCU, for this report]

DO-17(DOVE)
 (Downlink 145.825 MHz FM, 1200 Baud AFSK. Beacon 2401.220 MHz)
Operational.
The DOVE S band beacon is on. The frequency is 2401.220 MHz. The 2
meter transmitter is also on, 145.825 MHz. Telemetry is being sent
about every 30 seconds. A scanned image of the Dove's QSL at 425DXNews

Web Site: http://www-dx.deis.unibo.it/htdx/
[ANS thanks Jim White, WD0E, for this update]

WEBERSAT (WO-18)
(Downlink 437.104 MHz SSB, 1200 Baud PSK AX.25)
WEBERSAT-OSCAR-18 celebrated eight years in space on January 22, 1998 at 0135 UTC! The satellite is gathering and sending weekly Whole Orbit Data. The PHOTO task has been uploaded and new photos are being taken and broadcast weekly. Since WO-18's return to service is suspected to be seasonal in nature, you might want to give the bird a try before too much time passes.
[ANS thanks the WO-18 Command Team for this news.]

LUSAT-OSCAR-19
(Uplink 1200 bps Manchester FSK Uplinks: 145.84, 145.86, 145.88, 145.90 MHz FM, Downlink 437.125 MHz SSB, 1200 bps RC-BPSK.)
Operating normally.
uptime is 955/21:49:50. Time is Sat Jan 31 11:55:00 1998
+X (RX) Temp -2.113 D RX Temp 0.131 D
Bat 1 Temp 2.374 D Bat 2 Temp 3.496 D
Baseplt Temp 2.935 D RC PSK BP Temp 2.374 D
RC PSK HPA Tmp 2.935 D +Y Array Temp 2.374 D
PSK TX HPA Tmp 1.252 D +Z Array Temp -3.796 D
RC PSK TX Out 0.520 W

Total Array C= 0.129 Bat Ch Cur= 0.025 Ifb= 0.031 I+10V= 0.101
TX:016 BCR:81 PWRC:36E BT:3C WC: 0

General information and telemetry samples can be found at:
http://www.arrakis.es/~ea1bcu/lo19.htm
[ANS thanks Miguel A. Menendez, EA1BCU, for this report]

UO-22
(Uplink: 145.900 or 145.975 MHz FM. Downlink 435.120 MHz FM 9600 Baud FSK)
UO-22 is operating normally.
[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Ground station and Operations Manager of UO-22, for this report]

IO-26 (ITAMSAT)
Uplink 145.875, 145.900, 145.925, 145.950 MHz FM, Downlink 435.822 MHz SSB, 1200 Baud PSK)
No report at this time.

[Please send your Satellite or News reports to ANS Editor BJ Arts, WT0N, via e-mail, at bjarts@the-bridge.net or to wt0n@amsat.org or visit WT0N's Homepage http://www.qsl.net/wt0n]

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